

9. (Amended) An isolated DNA molecule [of claim 3] comprising at least 32 contiguous nucleotides selected from nucleotides [412-1041] 1752-2382 of SEQ ID NO:2.

10. (Amended) [An] The isolated DNA molecule of claim 9 comprising the nucleotide sequence of [412-1041] 1752-2382 of SEQ ID NO:2.

11. (Amended) An isolated DNA molecule [of claim 3] comprising at least 23 contiguous nucleotides selected from nucleotides [1234-2263] 2575-3604 of SEQ ID NO:2.

12. (Amended) [An] The isolated DNA molecule of claim 11 comprising [the nucleotide sequence of 1234-2263] nucleotides 2575-3604 of SEQ ID NO:2.

13. (Amended) An isolated DNA molecule [of claim 3] comprising at least 22 contiguous nucleotides selected from nucleotides [2430-2691] 3770-4032 of SEQ ID NO:2.

14. (Amended) [An] The isolated DNA molecule of claim 13 comprising [the nucleotide sequence of 2430-2691] nucleotides 3770-4032 of SEQ ID NO:2.

20. (Amended) A [host] transgenic seed coat cell capable of expressing a gene of interest under control of a regulatory region, wherein the gene of interest and regulatory region are contained [the DNA molecule] within the vector of claim 16.

22. (Amended) A [host] transgenic seed coat cell capable of expressing the DNA molecule within the vector of claim 18.

24. (Amended) A transgenic soybean plant comprising the vector of claim 16.

26. (Amended) A transgenic soybean plant comprising the vector of claim 18.

27. (Amended) A method for the production of soybean seed coat peroxidase in a host [cell] comprising:

i) transforming the host [cell] with a vector comprising [an] the isolated DNA molecule [selected from the group consisting and SEQ ID NO:2] as defined in claim 1 operably linked with a regulatory region; and

ii) culturing the host [cell] under conditions to allow expression of the soybean seed coat peroxidase.

28. (Amended) A process for producing a heterologous gene of interest in a transgenic soybean plant comprising [propagating a transformed plant with], transforming the transgenic soybean plant with the heterologous gene of interest under control of a regulatory region, the heterologous gene of interest and the regulatory region contained within the vector of claim 16, and growing the transgenic plant under conditions to allow expression of the heterologous gene of interest.

Cancel claims 5 and 6 without prejudice.

Add new claims 30-37 as follows:

--30. A vector comprising the DNA molecule of claim 7.

31. A process for producing a heterologous gene of interest in a transgenic soybean plant comprising, transforming the transgenic soybean plant with the heterologous gene of interest under control of a regulatory region, the heterologous gene of interest and the regulatory region contained within the vector of claim 30, and growing the transgenic plant under conditions to allow expression of the heterologous gene of interest.

32. An isolated DNA molecule comprising at least 20 contiguous nucleotides selected from nucleotides 1524-1610 of SEQ ID NO:2.

33. The isolated DNA molecule of claim 32 comprising nucleotides 1524-1610 of SEQ ID NO:2.

34. The use of the isolated DNA molecule of claim 32 as a marker for selecting soybean plants carrying an Ep allele.

35. The use of the isolated DNA molecule of claim 32 as a marker to select soybean plants comprising a deletion in a peroxidase gene.

36. A method of selecting between an EpEp and an epep plant genotype comprising the steps of:

- a) preparing genomic DNA, or cDNA from a plant;
- b) fragmenting the genomic DNA or cDNA to produce DNA fragments;
- c) separating the DNA fragments;
- d) hybridizing the fragments with a labelled nucleotide sequence, where the nucleotide sequence is the isolated DNA molecule defined in claim 32, to produce a hybridization pattern; and

e) determining whether the hybridization pattern is representative of an EpEp or an epep genotype.

37. A method of selecting between an EpEp and an epep plant genotype comprising the steps of:

- a) preparing genomic DNA, or cDNA from a plant;
- b) fragmenting the genomic DNA or cDNA to produce DNA fragments;
- c) amplifying the DNA fragments using at least one primer, the at least one primer comprising the isolated DNA molecule defined in claim 32 to produce an amplified product; and
- d) determining whether the amplified product is representative of an EpEp or epep genotype.--

REMARKS

Reconsideration of this application and entry of the foregoing amendments are respectfully requested.

With this amendment, claims 3, 4, 9-14, 20, 22, 24 and 26-28 have been amended, claims 5 and 6 cancelled without prejudice, and claims 30-37 have been added. Claims 1-4 and 7-37 stand in the present application.

Pages 5-7 and 19 of the disclosure have been amended to make reference to the correct nucleotide sequences of SEQ ID NO:2. These changes were made to account for amending SEQ ID